CLAIMS

We claim:

1. A skin incision device comprising:

a housing having a bottom surface with a slot formed therein;

a top positioned on said housing, said top being slidable in a direction transverse to a plane of said bottom surface;

a blade pivotally positioned in said housing generally adjacent said slot, said blade having a pre-actuated position and a post-actuated position; and

a spring means cooperatively positioned between said top and an interior of said housing, said spring means being actuatable by the slidable movement of said top toward said bottom surface, said spring means for moving said blade between said pre-actuated position and said post-actuated position such that at least a portion of said blade extends outwardly of said bottom surface through said slot during the movement between said pre-actuated position and said post-actuated position.

2. The device of Claim 1, said housing having a generally open end opposite said bottom surface, said housing having sides extending upwardly from said bottom surface, said top extending over said open end and over at least a portion of said sides of said housing.

3. The device of Claim 2, at least of one said sides of said housing having a barb extending outwardly therefrom, said top having a wall extending over a portion of the side of said housing, said wall having a first retaining slot formed therein and a second retaining slot formed therein above said first retaining slot, said barb engaging said first retaining slot when said spring means is in said pre-actuated position, said barb engaging said second retaining slot when said spring means is in post-actuated position.

4. The device of Claim 1, said spring means comprising:

an actuator spring having an end cooperative with an inner surface of said top and extending downwardly into said housing; and

a carriage element means positioned within said housing, said actuator spring contacting a surface of said carriage element means, said carriage element means moveable within said housing for moving said blade between said pre-actuated position and said post-actuated position.

5. The device of Claim 4, said carriage element means comprising:

a carriage element having one end affixed within said housing, said carriage element having a first jointed area formed therein, said actuator spring having an opposite end in contact with said first jointed area, said carriage element having an opposite end connected to said blade.

6. The device of Claim 5, said carriage element positioned in a guide area within said housing, said carriage element having a second jointed area formed thereon of a generally U-shaped construction.

7. The device of Claim 6, said end of said actuator spring affixed to said inner surface of said top, said actuator spring being a leaf spring, said actuator spring having a knuckle formed at an opposite end thereof, said carriage element means further comprising:

a retainer affixed to a surface of said carriage element, said knuckle received within said retainer when said blade is in said pre-actuated position, said knuckle being separable from said retainer when said top moves toward said bottom surface of said housing.

8. The device of Claim 1, said blade comprising:

a razor member having a cutting edge; and

a cam connected to an end of said blade and positioned interior of said housing, said spring means being cooperatively connected to said cam so as to pivotally move said razor member between the pre-actuated position and the post-actuated position.

9. The device of Claim 8, said housing having a blade retainer peg formed therein adjacent said slot, said blade positioned onto said blade retainer peg, said blade being pivotally connected to said cam.

10. The device of Claim 9, said blade having an obround formed therein, said obround positioned over said blade retainer peg.

11. The device of Claim 9, further comprising:

an abutment member affixed within said housing and having a surface contacting a surface of said cam as said razor member moves between the pre-actuated position and post-actuated position.

12. The device of Claim 1, said housing comprising:

a front panel; and

a back panel having a plurality of pegs extending toward said front panel, said plurality of pegs defining a guide path for said spring means.

13. A skin incision device comprising:

a housing having a bottom surface with a slot formed therein;

a top positioned on said housing, said top being slidable in a direction transverse to a plane of said bottom surface;

a blade pivotally positioned in said housing generally adjacent said slot, said blade having a pre-actuated position and a post-actuated position;

an actuator spring having an end cooperative with an inner surface of said top and extending downwardly into said housing; and

a carriage element means positioned within said housing, said actuator spring contacting a surface of said carriage element means, said carriage element means moveable within said housing for moving said blade between said pre-actuated position and said post-actuated position.

14. The device of Claim 13, said carriage element means comprising:

a carriage element having one end affixed within said housing, said carriage element having a first jointed area formed therein, said actuator spring having an opposite end in contact with said first jointed area, said carriage element having an opposite end interconnected to said blade.

15. The device of Claim 14, said carriage element positioned in a guide area within said housing, said carriage element having a second jointed area formed thereon of a generally U-shaped construction.

16. The device of Claim 15, said end of said actuator spring affixed to said inner surface of said top, said actuator spring being a leaf spring, said actuator spring having a knuckle formed at an opposite end thereof, said carriage element means further comprising:

a retainer affixed to a surface of said carriage element, said knuckle received within said retainer when said blade is in said pre-actuated position, said knuckle being separable from said retainer when said top moves toward said bottom surface of said housing.

17. The device of Claim 13, said blade comprising:

a razor member having a cutting edge; and

a cam connected to an end of said blade and positioned interior of said housing, said spring means being cooperatively connect to said cam so as to pivotally move said razor member between the pre-actuated position and the post-actuated position, said housing having a blade retainer peg formed therein adjacent said slot, said blade positioned onto said blade retainer peg, said blade being pivotally connected to said cam, said blade having an obround formed therein, said obround positioned over said blade retainer peg.

18. The device of Claim 17, further comprising:

an abutment member affixed within said housing and having a surface contacting a surface of said cam as said razor member moves between the pre-actuated position and post-actuated position.

19. A skin incision device comprising:

a housing having a bottom surface;

a top positioned on said housing, said top being slidable in a direction transverse to a plane of said bottom surface, said housing having a generally open end opposite said bottom surface, said housing having sides extending upwardly from said bottom surface, said top extending over said open end and over at least a portion of said sides of said housing, at least of one said sides of said housing having a barb extending outwardly therefrom, said top having a wall extending over a portion of the side of said housing, said wall having a first retaining slot formed therein and a second retaining slot formed therein above said first retaining slot;

a blade pivotally portioned in said housing generally adjacent said bottom of said housing, said blade having a pre-actuated position and a post-actuated position; and

a spring means cooperatively positioned between said top and an interior of said housing, said spring means being actuatable by the slidable movement of said top toward said bottom surface, said spring means for moving said blade between said pre-actuated position and said post-actuated position such that at least a portion of said blade extends outwardly of said bottom surface during the movement between said pre-actuated position and said post-actuated position, said barb engaging said first retaining slot when said spring means is in said pre-actuated position, said barb engaging said second retaining slot when said spring means is in said post-actuated position.